

CLAIMS

1. A rotor for a vertical shaft impact crusher, said
5 rotor (1; 201; 301) comprising a horizontal upper disc
(2) and a horizontal lower disc (4; 204; 304), said discs
being separated by at least two vertical wall segments
(20, 22, 24; 220; 320) defining between them an outflow
opening (26) for material leaving the rotor (1; 201;
10 301), said wall segments (20, 22, 24; 220; 320) each
having a first wall portion (20a; 220a; 320a) being
substantially tangential in relation to the rotor (1;
201; 301) and being located adjacent to the periphery of
the rotor (1; 201; 301) and a second wall portion (20b;
15 220b; 320b) being angled in relation to said first wall
portion (20a; 220a; 320a) and extending from the first
wall portion (20a; 220a; 320a) into the rotor (1; 201;
301), characterised in that said second
wall portion (20b; 220b; 320b) comprises a straight first
20 section (80; 280; 380) extending from the interior of the
rotor (1; 201; 301) towards the periphery of the rotor
(1; 201; 301), said first section (80; 280; 380) forming
an obtuse first angle (S) with said first wall portion
(20a; 220a; 320a), and a second section (84; 284; 384)
25 connecting the first section (80; 280; 380) and the first
wall portion (20a; 220a; 320a), said second section (84;
284; 384) and said first wall portion (20a; 220a; 320a)
forming a second angle (T) being smaller than said first
angle (S), said second section (84; 284; 384) and said
30 first wall portion (20a; 220a; 320a) forming at least one
pocket (88; 288; 388, 389) for retaining material.
2. A rotor according to claim 1, wherein said first
angle (S) is 110-155°.
3. A rotor according to claim 2, wherein said first
35 angle (S) is 120-150°.
4. A rotor according to any one of claims 1-3,
wherein said second angle (T) is 75-100°.

5. A rotor according to claim 4, wherein said second angle (T) is 86-94°.
6. A rotor according to any one of claims 1-5, wherein the horizontal length (D; D1; D2) of the second section (84; 284; 384) is less than a tip distance (E) being the shortest distance between the second section (84; 284; 384) and a trailing edge (37) of a wear tip (36) located adjacent to a free vertical edge (76) of the first wall portion (20a; 220a; 320a).
- 10 7. A rotor according to claim 6, wherein said horizontal length (D; D1; D2) is 20-70% of the tip distance (E).
- 15 8. A rotor according to claim 7, wherein said horizontal length (D; D1; D2) is 35-60% of the tip distance (E).
9. A rotor according to any one of claims 1-8, wherein a second pocket (389) for retaining material is formed between said first section (380) and said second section (384).
- 20 10. A rotor according to any one of claims 1-9, wherein the wall segment (20) is adapted for building a bed (40) of material extending continuously from the first wall portion (20a) to a rear support plate (42) mounted at the first section (80) of the second wall portion (20b).